

# 7 Benefits of using Wood in Industrial and Commercial Design

## 1. COST EFFECTIVENESS

THE AVERAGE PRICE FOR STEEL MID-RISE BUILDINGS WAS \$208.4/SQUARE FOOT AND FOR CONCRETE CAME IN AT \$156.5/SQUARE FOOT, COMPARED TO WOOD AT \$119.7/SQUARE FOOT. IN NORTH AMERICA, THESE COST SAVINGS COME FROM DIFFERENCES IN MATERIAL AND CONSTRUCTION COSTS, YET WOOD-FRAMED BUILDINGS STILL MEET ALL CODE REQUIREMENTS FOR SAFETY AND PERFORMANCE.



## 2. VERSATILITY AND ADAPTABILITY

A FEATURE OF COMMERCIAL AND INDUSTRIAL BUILDINGS IS THAT THEY OFTEN NEED TO BE FLEXIBLE AS TENANTS' NEEDS CHANGE OVER TIME. FOR THIS REASON, SPACES ARE OFTEN DESIGNED TO BE AS OPEN AND UNOBSTRUCTED AS POSSIBLE. WHEN IT COMES TO ROOF FRAMING, THERE ARE MULTIPLE WOOD OPTIONS AVAILABLE TO ACHIEVE THE LONG SPANS NECESSARY FOR AN OPEN FLOOR PLAN.



## 3. EASE OF USE

TIMBER BUILDINGS CAN ALSO BE CONSTRUCTED YEAR-ROUND IN MOST CLIMATES AND ANY ONSITE ADJUSTMENTS ARE SIMPLE AND QUICK TO ACCOMPLISH PARTICULARLY GIVEN THE FLEXIBILITY AND VERSATILITY OF LIGHT-FRAME WOOD CONSTRUCTION. USING WOOD CAN ALSO BE AN ADVANTAGE FOR TIGHT, URBAN JOB SITES, WHERE FINDING THE SPACE FOR CONCRETE DELIVERY AND MIXING OR STEEL FABRICATION CAN BE CHALLENGING.



## 4. SUSTAINABILITY

COMPARED TO THE STEEL BUILDING, THE WOOD BUILDING SAVES 642 METRIC TONNES OF CARBON DIOXIDE EQUIVALENT AND 9,116 GIGAJOULES OF NON-RENEWABLE ENERGY USE. THE WOOD BUILDING AVERAGES 30% LESS IMPACT ACROSS ALL INDICATORS AND FOR END-OF-LIFE TRANSPORT THE WOODBUILDING HAS 11% LESS IMPACT ACROSS ALL INDICATORS.



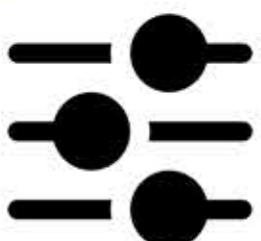
## 5. AESTHETICS & BIOPHILIC

WOOD'S NATURAL BEAUTY CAN ADD WARMTH, TEXTURE, AND CHARACTER TO ANY SPACE AND STUDIES HAVE SHOWN THAT PEOPLE HAVE POSITIVE ASSOCIATIONS WITH WOOD AND FIND IT VISUALLY APPEALING. EXPOSED WOOD TRUSSES OR HEAVY TIMBER COLUMNS ADD IMMEDIATE INTEREST TO A COMMERCIAL BUILDING AND SET IT APART FROM THE VAST FIELD OF OTHERWISE SIMILAR SPACES.



## 6. CHOICE AND CUSTOMIZATION

"WOOD CONSTRUCTION" DOES NOT REFER TO JUST ONE TYPE OF SYSTEM OR PRODUCT. OPTIONS INCLUDE TRADITIONAL DIMENSION LUMBER FRAMING BUT EXPAND TO ALSO ENCOMPASS EXPOSED MASS TIMBER AND PRODUCTS LIKE CLT, NLT, AND GLULAM. EACH SYSTEM HAS DIFFERENT ADVANTAGES AND THE CHOICE OF SYSTEM IS DRIVEN BY THE PROJECT'S DEMANDS, BUT WOOD CONSTRUCTION IS CUSTOMIZABLE AND FLEXIBLE ENOUGH TO MEET THOSE NEEDS.



## 7. DURABILITY

WHEN WOOD IS PROPERLY MAINTAINED, IT CAN LAST HUNDREDS OF YEARS. HISTORIC EXAMPLES ACROSS THE WORLD HAVE STOOD FOR CENTURIES AND WITH TODAY'S MODERN WOOD PRESERVATIVES, THIS NATURAL DURABILITY CAN BE ENHANCED. WHEN TREATED AND MAINTAINED CORRECTLY, WOOD CAN WITHSTAND THE ELEMENTS AND IS WELL-SUITED TO ALMOST ANY CLIMATE.

